



Topological Aspects of Quantum Gravity and Quantum Information Theory

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Message from the Guest Editors

Dear Colleagues,

Both in the field of quantum gravity and in quantum information theory, the importance of topology is increasing. The discovery of topological phases of matter, together with the existence of analogue systems of gravity and their evident relation to quantum information, bring interesting scenarios where important discoveries will appear.

Understanding topological aspects in gravity might have a direct relation to topological aspects in related field theories as well as in condensed matter systems. These important subjects will be explored in this Special Issue.

This Special Issue invites contributions reporting progress related to topological aspects both in the field of quantum gravity and in quantum information theory. Moreover, contributions focusing on suitable pedagogical introductions and model building related to existing theories are welcome.





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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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